

WHAT IS CLAIMED IS:

1. A heating assembly, comprising:

5 a pan;

an insulating frame, wherein the pan is
attached to the insulating frame;

10 a substrate having a major surface and a
conductive coating disposed thereon, wherein the
substrate is attached to the insulating frame;

and

at least two bus bars, the bus bars being
disposed onto and in electrical contact with the
coating.

15 2. The heating assembly of claim 1, wherein the

insulating frame comprises a ring.

20 3. The heating assembly of claim 2, wherein the
pan comprises metal.

4. The heating assembly of claim 3, wherein the
pan is attached to a cooktop.

5. The heating assembly of claim 1, wherein the insulating frame comprises a high temperature dielectric material.

5 6. A warming device comprising the heating assembly of claim 1, wherein the substrate is comprised of borosilicate glass or tempered soda-lime silica glass.

10 7. A warming drawer comprising the warming device of claim 6.

8. A bread warmer comprising the warming device of claim 6.

15 9. A heating device comprising the heating assembly of claim 1, wherein the substrate is comprised of a ceramic or glass-ceramic composite.

20 10. A cooktop comprising the heating device of claim 9.

11. The cooktop of claim 10, wherein the pan is attached to the cooktop and the cooktop is spaced

apart from the substrate by a dimension in the range of 8 to 12 mm.

5 12. A countertop burner comprising the heating device of claim 9.

10 13. The heating assembly of claim 1, further comprising at least one temperature sensor in thermal contact with the substrate or cooking surface.

15 14. The heating assembly of claim 13, further comprising an appliance control system that communicates with the temperature sensor to regulate the electrical current that is conducted through the coating, thus controlling the heating of the heating assembly.

20 15. The heating assembly of claim 1, wherein the conductive coating comprises a conductive metal oxide.

16. The heating assembly of claim 1, wherein the bus bars comprise copper disposed by way of a heating head and mask apparatus.

17. A cooking appliance, comprising:

5 a cooktop;

 a metal pan, wherein the metal pan is attached
 to the cooktop;

 an insulating ring, wherein the insulating
 frame is attached to the pan;

10 a substrate having a major surface and a
 conductive coating disposed thereon, wherein the
 substrate is attached to the insulating ring; and

 at least two bus bars, the bus bars being
 disposed onto and in electrical contact with the
 coating.

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